Abstract of the Disclsure

Phosphor from the class of the oxynitridosilicates, having a cation M which is doped with divalent europium and having the empirical formula $M_{(1-c)}Si_2O_2N_2:D_c$, where M = Sr or M = $Sr_{(1-x-y)}Ba_yCa_x$ with x+y < 0.5 is used, the oxynitridosilicate completely or predominantly comprising the high-temperaturestable modification HT.